# 10/004,377 Updated S

| Ref | Hits  | Search Query  | DBs   | Default<br>Operator | Plurals | Time Stamp       |
|-----|-------|---|---|---------------------|---------|------------------|
| 15  | 1722  | (chang\$4 or modif\$4 or updat\$4)<br>with (log adj file)       | US-PGPUB;<br>USPAT;<br>USOCR;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR                  | ON      | 2006/04/05 13:17 |
| L2  | 274   | (transmit\$4 or send\$4 or deliver\$4) same L1                  | US-PGPUB;<br>USPAT;<br>USOCR;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR                  | ON      | 2006/04/05 13:17 |
| L3  | 16350 | (log\$4 or collect\$4 or record\$4) near2 remote                | US-PGPUB;<br>USPAT;<br>USOCR;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR                  | ON      | 2006/04/05 13:17 |
| L4  | 26    | L2 and L3   | US-PGPUB;<br>USPAT;<br>USOCR;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR                  | ON      | 2006/04/05 13:19 |
| L5  | 3     | 4 and (substantial\$4 adj<br>concurrent\$4 adj4 time)           | US-PGPUB;<br>USPAT;<br>USOCR;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR                  | ON      | 2006/04/05 13:39 |
| L6  |       | 4 and (concurrent\$4 adj4 time)                                 | US-PGPUB;<br>USPAT;<br>USOCR;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR                  | ON      | 2006/04/05 14:21 |
| L7  | 7     | 4 and (substantial\$4 adj4 time)                                | US-PGPUB;<br>USPAT;<br>USOCR;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR                  | ON      | 2006/04/05 13:32 |
| L8  | 3     | 1 and 2 and 3 and (substantial\$4 same concurrent\$4 same time) | US-PGPUB;<br>USPAT;<br>USOCR;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR                  | ON      | 2006/04/05 13:39 |

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| L9 | 4   | 1 and 2 and 3 and (mirror\$4 same concurrent\$4)                    | US-PGPUB;<br>USPAT;<br>USOCR;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR   | ON   | 2006/04/05 14:22 |
| S1 | 299 | updat\$4 same bitmap\$4 same<br>writ\$4                             | US-PGPUB;<br>USPAT;<br>USOCR;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR   | ON   | 2005/05/02 16:03 |
| S2 | 48  | S1 same (fail\$4 or error\$4 or problem or malfunction or fault\$4) | US-PGPUB;<br>USPAT;<br>USOCR;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR   | ON . | 2005/05/02 15:55 |
| S3 | 7   | S2 same synchroniz\$4   | US-PGPUB;<br>USPAT;<br>USOCR;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR   | ON   | 2005/05/02 16:04 |
| S4 | 0   | S3 same snapshot  | US-PGPUB;<br>USPAT;<br>USOCR;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR . | ON · | 2005/05/02 15:55 |
| S5 | 0   | S3 and snapshot   | US-PGPUB;<br>USPAT;<br>USOCR;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR   | ON   | 2005/05/02 16:05 |
| S6 | 11  | updat\$4 same ((first or second)<br>adj2 bitmap\$4) same writ\$4    | US-PGPUB;<br>USPAT;<br>USOCR;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR   | ON   | 2005/05/03 14:12 |
| S7 | 35  | restore adj region  | US-PGPUB;<br>USPAT;<br>USOCR;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR   | ON   | 2005/05/02 16:04 |

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| S8  | . 0 | S6 and S7            | US-PGPUB;<br>USPAT;<br>USOCR;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2005/05/02 16:04 |
| S9  | 9   | S6 and synchroniz\$4 | US-PGPUB;<br>USPAT;<br>USOCR;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2005/05/02 16:05 |
| S10 | 0   | S9 and snapshot      | US-PGPUB;<br>USPAT;<br>USOCR;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2005/05/02 16:05 |
| S11 | 2   | S6 not S9            | US-PGPUB;<br>USPAT;<br>USOCR;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2005/05/02 16:17 |
| S12 | 1   | "5155845".PN.        | USPAT;<br>USOCR   | OR | ON | 2005/05/02 16:10 |
| S13 | 1   | "5410667".PN.        | USPAT;<br>USOCR   | OR | ON | 2005/05/02 16:11 |
| S14 | 1   | "5724501".PN.        | USPAT;<br>USOCR   | OR | ON | 2005/05/02 16:11 |
| S15 | 1   | "5761704".PN.        | USPAT;<br>USOCR   | OR | ON | 2005/05/02 16:11 |
| S16 | 1   | "5799147".PN.        | USPAT;<br>USOCR   | OŖ | ON | 2005/05/02 16:11 |
| S17 | 1   | "5835954".PN.        | USPAT;<br>USOCR   | OR | ON | 2005/05/02 16:11 |
| S18 | 1   | "6058054".PN.        | USPAT;<br>USOCR   | OR | ON | 2005/05/02 16:11 |
| S19 | 1   | "6145066".PN.        | USPAT;<br>USOCR   | OR | ON | 2005/05/02 16:11 |
| S20 | 1   | "6145066".PN.        | USPAT;<br>USOCR   | OR | ON | 2005/05/02 16:12 |
| S21 | 1   | "6363385".PN.        | USPAT;<br>USOCR   | OR | ON | 2005/05/02 16:12 |
| S22 | 1   | "6269431".PN.        | USPAT;<br>USOCR   | OR | ON | 2005/05/02 16:12 |

| S23 | 1   | "6408370".PN.   | USPAT;<br>USOCR   | OR | ON      | 2005/05/02 16:13 |
|-----|-----|---|---|----|---------|------------------|
| S24 | 1   | "6564307".PN.   | USPAT;<br>USOCR   | OR | ON      | 2005/05/02 16:13 |
| S25 | 0   | "6732245".uref.   | US-PGPUB;<br>USPAT;<br>USOCR;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON      | 2005/05/02 16:17 |
| S26 | 1   | ((first or primary or second\$4 or<br>premiere) adj2 updat\$4) same<br>((first or second) adj2 bitmap\$4)<br>same writ\$4 | US-PGPUB;<br>USPAT;<br>USOCR;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON      | 2005/05/02 16:25 |
| S27 | . 2 | ("6732245").PN.   | US-PGPUB;<br>USPAT;<br>USOCR;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | OFF     | 2005/05/03 14:07 |
| S28 | 2   | ("6757797").PN.   | US-PGPUB;<br>USPAT;<br>USOCR;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | OFF     | 2005/05/03 14:07 |
| S29 |     | (first or second) adj2 (bit-map or<br>(bit adj map) or bitmap\$4)   | US-PGPUB;<br>USPAT;<br>USOCR;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON      | 2005/05/03 14:43 |
| S31 | 41  | updat\$4 with S29   | US-PGPUB;<br>USPAT;<br>USOCR;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON      | 2005/05/03 14:39 |
| S32 | 465 | synchroniz\$4 same (snapshot or<br>snap-shot or (snap adj shot))  | US-PGPUB;<br>USPAT;<br>USOCR;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON<br>· | 2005/05/03 14:41 |

| S33 . | 0    | S31 and S32  | US-PGPUB;<br>USPAT;<br>USOCR;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON  | 2005/05/03 14:23 |
|-------|------|--|---|----|-----|------------------|
| S34   | 2    | S31 and (snapshot or snap-shot or (snap adj shot)) | US-PGPUB;<br>USPAT;<br>USOCR;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON  | 2005/05/03 14:24 |
| S35   | 350  | veritas.as.  | US-PGPUB;<br>USPAT;<br>USOCR;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON  | 2005/05/03 14:40 |
| S36   | 0    | S29 and S35  | US-PGPUB;<br>USPAT;<br>USOCR;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON  | 2005/05/03 14:40 |
| S37   | 26   | S35 and (snapshot or snap-shot or (snap adj shot)) | US-PGPUB;<br>USPAT;<br>USOCR;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON  | 2005/05/03 14:42 |
| S38   | 6    | S35 and (bit-map or (bit adj map)<br>or bitmap\$4) | US-PGPUB;<br>USPAT;<br>USOCR;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON  | 2005/05/05 10:07 |
| S39   | . 2  | ("5751965").PN.                                    | US-PGPUB;<br>USPAT;<br>USOCR;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | OFF | 2005/05/05 10:07 |
| S40   | 1582 | (714/6.ccls.)                                      | US-PGPUB;<br>USPAT;<br>USOCR;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON  | 2005/10/20 14:30 |

| S41 | 777  | (714/5.ccls.)   | US-PGPUB;<br>USPAT;<br>USOCR;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2005/10/20 16:07 |
|-----|------|---|---|----|----|------------------|
| S42 | 1250 | (first or second) adj2 (bit-map or<br>(bit adj map) or bitmap\$4) | US-PGPUB;<br>USPAT;<br>USOCR;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2005/10/20 16:07 |
| S43 | 47   | updat\$4 with S42   | US-PGPUB;<br>USPAT;<br>USOCR;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2005/10/20 16:07 |
| S44 | 47   | S43   | US-PGPUB;<br>USPAT;<br>USOCR;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2005/10/20 16:08 |
| S45 | 430  | veritas.as.   | US-PGPUB;<br>USPAT;<br>USOCR;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2005/10/20 16:09 |
| S46 | 36   | S45 and (snapshot or snap-shot or (snap adj shot))                | US-PGPUB;<br>USPAT;<br>USOCR;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2005/10/20 16:09 |
| S47 | 36   | <b>S46</b>  | US-PGPUB;<br>USPAT;<br>USOCR;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2005/10/20 16:09 |
| S48 | 10   | S45 and (bit-map or (bit adj map)<br>or: bitmap\$4)               | US-PGPUB;<br>USPAT;<br>USOCR;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2005/10/20 16:09 |

| S49 | 10   | S48  | US-PGPUB;<br>USPAT;<br>USOCR;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2005/10/20 16:09 |
|-----|------|--|---|----|----|------------------|
| S50 | 1582 | (714/6.ccls.)                                | US-PGPUB;<br>USPAT;<br>USOCR;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2005/10/20 16:10 |
| S51 | 1582 | S50  | US-PGPUB;<br>USPAT;<br>USOCR;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2005/10/20 16:10 |
| S52 | 3321 | (711/112,161,162,165.ccls.)                  | US-PGPUB;<br>USPAT;<br>USOCR;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2006/04/04 16:49 |
| S53 | 1019 | (714/8,12,13.ccls.)                          | US-PGPUB;<br>USPAT;<br>USOCR;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2005/10/20 16:17 |
| S54 | 340  | updat\$4 same bitmap\$4 same<br>writ\$4      | US-PGPUB;<br>USPAT;<br>USOCR;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2005/10/20 16:17 |
| S55 |      | S54 and (S41 or S50 or S52 or S53)           | US-PGPUB;<br>USPAT;<br>USOCR;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2005/10/20 16:17 |
| S56 | 68   | (galipeau-kenneth\$ or<br>lee-winston\$).in. | US-PGPUB;<br>USPAT;<br>USOCR;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON | 2006/04/04 16:34 |

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| S57 | · 1725 | (714/6).ccls.   | US-PGPUB;<br>USPAT;<br>USOCR;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON   | 2006/04/04 16:46 |
| S58 | 884    | (714/5).ccls.   | US-PGPUB;<br>USPAT;<br>USOCR;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON   | 2006/04/04:16:46 |
| S59 | 617    | (714/7).ccls.   | US-PGPUB;<br>USPAT;<br>USOCR;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON   | 2006/04/04 16:48 |
| S60 | 898    | (714/15).ccls.  | US-PGPUB;<br>USPAT;<br>USOCR;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON   | 2006/04/04 16:49 |
| S61 | 1287   | (714/8,12,13,16).ccls.  | US-PGPUB;<br>USPAT;<br>USOCR;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON   | 2006/04/04 16:49 |
| S62 | 3657   | (711/112,161,162,165).ccls.                                     | US-PGPUB;<br>USPAT;<br>USOCR;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON   | 2006/04/04 16:50 |
| S63 | 1722   | (chang\$4 or modif\$4 or updat\$4)<br>with (log adj file)       | US-PGPUB;<br>USPAT;<br>USOCR;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON · | 2006/04/04 16:52 |
| S64 | 28     | (transmit\$4 or send\$4 or<br>deliver\$4) same remote same \$63 | US-PGPUB;<br>USPAT;<br>USOCR;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR | ON   | 2006/04/05 10:00 |

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| S65 | 3    | S64 and (S57 or S58 or S59 or S60 or S61 or S62)       | US-PGPUB;<br>USPAT;<br>USOCR;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR     | ON | 2006/04/04 16:54 |
| S66 | 4    | S64 and ("714"/\$).ccls.                               | US-PGPUB;<br>USPAT;<br>USOCR;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR     | ON | 2006/04/04 16:54 |
| S67 | 1    | S64 and ("711"/\$).ccls.                               | US-PGPUB;<br>USPAT;<br>USOCR;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR ·   | ON | 2006/04/05 09:21 |
| S68 | 7    | re37601  | US-PGPUB;<br>USPAT;<br>USOCR;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR     | ON | 2006/04/05 09:21 |
| S69 | 1722 | (chang\$4 or modif\$4 or updat\$4) with (log adj file) | US-PGPUB;<br>USPAT;<br>USOCR;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR     | ON | 2006/04/05 10:00 |
| S70 | 274  | (transmit\$4 or send\$4 or<br>deliver\$4) same S69     | US-PGPUB;<br>USPAT;<br>USOCR;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR     | ON | 2006/04/05 10:00 |
| S71 | 20   | remote adj log\$4 adj file ု                           | US-PGPUB;<br>USPAT;<br>USOCR;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR     | ON | 2006/04/05 10:01 |
| 572 | 1    | S70 and S71  | US-PGPUB;<br>USPAT;<br>USOCR;<br>EPO; JPO;<br>DERWENT;<br>IBM_TDB | OR     | ON | 2006/04/05 10:02 |

| S73 | 16350 | (log\$4 or collect\$4 or record\$4)<br>near2 remote | US-PGPUB;<br>USPAT;<br>USOCR;<br>EPO; JPO;<br>DERWENT; | OR | ON | 2006/04/05 10:02 |
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181 Optimizing data aggregation for cluster-based internet services

Lingkun Chu, Hong Tang, Tao Yang, Kai Shen

June 2003 ACM SIGPLAN Notices, Proceedings of the ninth ACM SIGPLAN symposium on Principles and practice of parallel programming PPoPP '03,

Volume 38 Issue 10

Publisher: ACM Press

Full text available: pdf(275.38 KB)

Additional Information: full citation, abstract, references, index terms,

Large-scale cluster-based Internet services often host partitioned datasets to provide incremental scalability. The aggregation of results produced from multiple partitions is a fundamental building block for the delivery of these services. This paper presents the design and implementation of a programming primitive -- Data Aggregation Call (DAC) -to exploit partition parallelism for cluster-based Internet services, A DAC request specifies. a local processing operator and a global reduction ope ...

Keywords: cluster-based network services, fault tolerance, load-adaptive tree formation, response time, scalable data aggregation, throughput

182 System support for pervasive applications

Robert Grimm, Janet Davis, Eric Lemar, Adam Macbeth, Steven Swanson, Thomas Anderson, Brian Bershad, Gaetano Borriello, Steven Gribble, David Wetherall November 2004 ACM Transactions on Computer Systems (TOCS), Volume 22 Issue 4

Publisher: ACM Press

Full text available: mpdf(1.82 MB) Additional Information: full citation, abstract, references, index terms

Pervasive computing provides an attractive vision for the future of computing. Computational power will be available everywhere. Mobile and stationary devices will dynamically connect and coordinate to seamlessly help people in accomplishing their tasks. For this vision to become a reality, developers must build applications that constantly adapt to a highly dynamic computing environment. To make the developers' task feasible, we present a system architecture for pervasive computing, called & ...

**Keywords**: Asynchronous events, checkpointing, discovery, logic/operation pattern, migration, one world, pervasive computing, structured I/O, tuples, ubiquitous computing